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## (54) LIQUID JET RECORDING HEAD

### (57) Abstract:

**PURPOSE:** To perform a mass production of a high-performance head with little dispersion and to enable a high-image quality printing using said head by a method wherein the aligning-direction length of an area of an energy acting part in the vicinity of the center and the aligning-direction length of only one of side areas of the energy acting part which are not used for a liquid discharge meet a specific relation, and the energy acting part is formed by a photo-application.

**CONSTITUTION:** In the construction of a liquid jet recording head: a numeral 11 represents an area of an energy acting part (here, a heating part) with a length  $D_u$  in an alignment direction which is used for an ink drip discharge; a numeral 12 represents an area of the energy acting part, i.e. a dummy heater area, with a length  $D_d$  in an alignment direction which is unused for an ink drip discharge; 11A is a heating element, and 11B is an electrode. Such an energy acting part is formed by a photo-application. In order to control the dispersion in discharge performance of the ink jet head within an allowable range, the dummy heater or the area corresponding thereto is provided. In this case, the head is so designed as to meet a relation of  $D_d \geq 0.0279D_u + 0.548$ , whereby the head with little dispersion, high quality, and suitability for mass production can be obtained.

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